

## Operating and Installation Instructions

# Commercial Dishwasher G 7856

To prevent accidents and machine damage read these instructions **before** installation or use. en - US

M.-Nr. 06 868 521

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### WARNING -When using your dishwasher follow basic precautions, including the following:

This dishwasher is only intended for specialized applications. Only use the machine for its intended purpose. Any other use, conversion or modification is dangerous. The manufacturer cannot be held responsible for damages caused by improper use of this machine.

This dishwasher complies with current safety requirements. Improper use of the machine can lead to personal injury and material damage.

Read all instructions before installing or using this machine.

Keep these operating instructions in a safe place and pass them on to any future user.

### Installation and service

Installation and repair work should be performed by a Miele authorized service technician. Work by unqualified persons could be dangerous and may void the warranty.

Do not use the machine until properly installed.

Do not install the machine in an area where a danger of explosion or of freezing temperatures may be present. ▶ The installation of this unit in non-stationary locations (e.g. ships) must be performed by a qualified installer or service agency, in strict accordance with national and local safety regulations and standards.

▶ Before installation, make sure that the voltage and frequency listed on the data plate correspond with the household electrical supply. This data must correspond to prevent injury and machine damage. Consult a qualified electrician if in doubt.

▶ Be certain this machine is properly installed and grounded by an authorized technician. To guarantee the electrical safety of this machine, continuity must exist between the machine and an effective grounding system. It is imperative that this basic safety requirement be met. If there is any doubt, have the electrical system checked by a qualified technician. The manufacturer cannot be held responsible for damage or injury, such as electric shock, caused by missing or defective grounding.

Do not install or use a damaged dishwasher. A damaged machine is dangerous. Unplug the machine and call your Miele dealer or the Miele Technical Service Department.

If the power cord is damaged it must only be replaced by a Miele Service technician with a genuine Miele power cord.

Do not use an extension cord to connect this machine to electricity. Extension cords do not guarantee the required safety of the machine (e.g. danger of overheating).

Defective components should be replaced by Miele original parts only. Only with these parts does the manufacturer guarantee that they comply with safety requirements.

Before installation or service, disconnect the power supply to the work area by unplugging the unit, "tripping" the circuit breaker or removing the fuse.

When work has been performed on the supply plumbing, the supply line to the commercial dishwasher must be bled.

Otherwise, the water softening system may be damaged.

### Use

Please follow the advice on installation in this manual and in the separate Installation Instructions.

Personnel operating the machine should be trained regularly.

Persons who lack physical, sensory or mental abilities, or experience with the machine should not use it without supervision or instruction by a responsible person.

Do not allow children to play in or around the dishwasher, or to operate it.

Do not tamper with the controls.

BURN AND SCALD HAZARD This dishwasher reaches very high temperatures. Take care when unloading the unit. Let baskets and inserts cool before touching them. Any water which may remain in containers will be very hot and should be emptied into the wash cabinet.

### BURN HAZARD

The heating elements become extremely hot during use. Do not touch the heating elements during or directly after the end of a program.

► Take care when handling liquids such as detergent, rinsing, wetting, or neutralizing agents. These may contain irritant or caustic ingredients. **Do not use any organic solvents.** Danger of explosion!

Follow the instructions and relevant safety procedures carefully. Wear protective gloves and goggles. The manufacturer's safety conditions must be observed with all chemical agents.

▶ Under certain conditions, hydrogen gas may be produced in a hot water system that has not been used for two weeks or more. HYDROGEN GAS IS EXPLOSIVE. If the hot water system has not been used for such a period, turn on all hot water faucets and let water flow from each for several minutes before using the dishwasher. This will release any accumulated hydrogen gas. Do not smoke or use an open flame during this time.

Avoid inhaling detergent. If swallowed, it can cause burning in the mouth and throat or inhibit breathing.

Be careful when sorting and loading items to be washed: locate sharp items so that they are not likely to damage the door seal; and load sharp knives with the handles up to reduce the risk of injuries.

The water in the machine must not be used as drinking water.

Do not sit or lean on the open door. This could cause the machine to tip or be damaged.

Never clean the machine or near its vicinity with a water or high pressure hose.

Only use cleaning agents formulated for special processes and approved by Miele for use with this machine. Keep all cleaning agents out of the reach of children. Use of unsuitable cleaning agents could adversely affect the components of the machine. ▶ Use only rinse agents for commercial dishwashers. When other rinse agents are used, there is the danger that the rinse load and the dishwasher might be damaged.

Pre-treatments with detergents can create suds, as can certain rinsing agents. For pre-treatment and / or cleaning only, use low-sudsing detergents which have been approved by Miele. Suds can have an adverse effect on the cleaning process.

When a chemical additive is recommended on technical application grounds (e.g. with a detergent), this does not imply that the manufacturer of the dishwasher takes responsibility for the affect of the chemical on the material of the items being cleaned. Please be aware that changes in formulation, storage conditions, etc., which may not be publicized by the chemical producer, can have a negative effect on the cleaning result.

Always follow the instructions of the chemical manufacturer when using detergents and special application chemicals. Only use such chemicals for the purpose and in the situation specified to avoid such dangers as chemical reactions and material damage.

► The dishwasher is designed only for operation with water and additive cleaning agents. Organic solvents must not be used in the machine. An explosion or machine corrosion could occur with the use of organic solvents.

▶ In critical applications where very stringent requirements must be met, it is highly recommended that all relevant factors for the process, such as cleaning agent, quality of water, etc., be discussed with a Miele Application Specialist.

The special inserts should only be used for their specific application.

▶ Do not wash plastic items unless they are marked "dishwasher safe" or the equivalent. If in doubt follow the manufacturers recommendations.

Empty any containers or utensils before arranging them in the machine.

▶ Do not allow any remains of acids or solvents, particularly hydrochloric acid or chloride solutions, to get into the wash cabinet. The presence of any solvents should be minimized (especially those in hazard class A1).

► To avoid corrosion damage ensure that solutions or steam containing hydrochloric acid do not come into contact with the steel outer casing of the machine.

### Accessories

Only specific additional equipment, made by Miele or approved by Miele, should be connected to this machine. Consult Miele on the type and application of such equipment.

### Disposal of the old machine

When disposing of your old dishwasher first make it unusable. Disconnect it from the mains power supply, cut off the cable and plug from the cable.

For environmental and safety reasons ensure the machine is completely drained of any residual water and detergent. (Observe safety regulations and wear safety goggles and gloves).

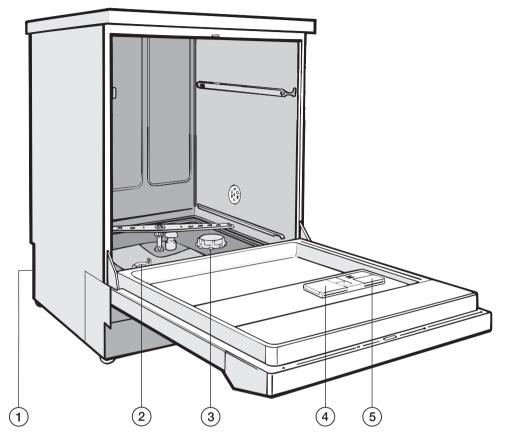
Remove the door to the washing compartment, so that children cannot accidentally shut themselves in. Make appropriate arrangements for the safe and environmentally responsible disposal of the machine.

For tank system machines ensure that all water is emptied out the tank.

The manufacturer cannot be held responsible for any damage caused by non-observance of these Important Safety Instructions.

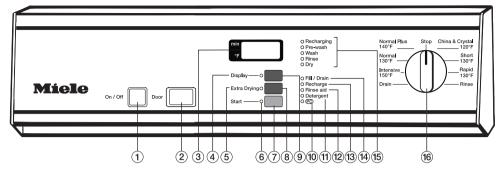
# SAVE THESE

## Guide to the machine



- Connection for DOS unit G 60 Dosage pump for liquid detergents optional (located on the rear side of the machine)
- (4) Compartment for powder detergent
- (5) Rinse aid reservoir (with dosage selector)

- 2 Filter combination
- ③ Salt reservoir (water softener)



- ① On/Off button (I-0)
- Door button
- ③Display
- Delay Start indicator (see "Programming special functions")
- (5) Extra drying indicator
- 6 Start indicator
- Start button
- 8 Extra drying button
- Display button to toggle between "Actual time" and "Elapsed wash time"

- ③ Serial interface (for use by Service Technicians)
- Add liquid cleaning agent indicator (only applies to machines equipped with an optional external DOS module)
- Add rinse aid indicator
- Add salt indicator
- 14 Check water inlet/drain indicator
- 15 Program sequence indicator
- 16 Program selector

## **Description of the machine**

This Miele machine is a commercial dishwasher with fresh water wash system and short batch times. It is especially suitable for use where quick turn-around flexible wash programs, and commercial durability are of the utmost importance.

The dishwasher is equipped with a water softener as a standard.

### To open the door

Press the door button, hold the door grip and pull open the door at the same time.

The door should only be opened during operation for emergencies, e.g. if items are knocking together or if a program fault is indicated in the display. See "Canceling a program".

▲ Do not touch the heating elements during or directly after the end of a program, you could burn yourself. They remain hot for some time after the end of the program.

When using the "Rapid" program the door must be kept closed between loads. The condensed water which builds up in the machine could cause corrosion or damage to surrounding countertops or furniture. See advice on installation locations in the "Installation" section of this manual.

### To close the door

Lift the door upwards and push until it clicks shut. Do not press the door button while shutting the door.

### Water Softener

To avoid the build-up of calcium deposits on items being cleaned and in the machine the water needs to be softened.

To ensure a steady supply of soft water the water softener unit must always be:

- 1. correctly set for the water hardness level in your area.
- the salt reservoir must be filled.
   (If the water hardness level is below 4 gr/gal (4 °d - German scale) the water does not need to be softened.)

The machine is set at the factory for a water hardness level of 19 gr/gal (19°d).

If the water supply is harder or softer than this (including below 4 gr/gal or 4 °d) the factory setting will need to be changed. For settings see chart.

Your local water authority will advise you of the water hardness in your area.

For fluctuating levels (e.g. 8 - 17 gr/gal or 8 - 17 °d) set the water softener to the highest setting (in this example to 17 gr/gal or 17°d).

The built-in water softener has settings from 1 - 62 gr/gal or 1  $^{\circ}$ d - 60  $^{\circ}$ d.

Enter your water hardness level here:

°d / gr/gal

### Setting the water softener

- Turn the machine off.
- Turn the program selector to "STOP".
- Press and hold the "Display" and "Start" buttons, and turn on the machine with the "On / Off" button. The actual program status "P..." is displayed. The "Fill/Drain" indicator lights.
- Press the "Extra Drying" button once.
   "E01" (program level 1) appears in the display.
- Turn the program selector to the 6 o'clock position.
   The number "19" is displayed (the factory water hardness setting in °d, equivalent to 19 gr/gal).
- Press and hold the "Display" button until the required value (water hardness in °d) is displayed. The counter returns to "0" after reaching "60".
- Press the "Start" button. "SP" appears.
- Press the "Start" button once more. The setting will now be stored. The display clears.

The machine is now ready for operation.

### Table of settings

°d (German scale)	gr/gal	Setting
$ \begin{array}{c} 1\\ 2\\ 3\\ 4\\ 5\\ 6\\ 7\\ 8\\ 9\\ 10\\ 11\\ 12\\ 13\\ 14\\ 15\\ 16\\ 17\\ 18\\ 19^{\bullet})\\ 20\\ 21\\ 22\\ 23\\ 24\\ 25\\ 26\\ 27\\ 28\\ 29\\ 30\\ 31\\ 32\\ 33\\ 34\\ 35\\ 36\\ 37\\ 38\\ 39\\ 40\\ 41\\ 42\\ 43\\ 44\\ 45\\ \end{array} $	$\begin{array}{c}1\\2\\3\\4\\5\\6\\7\\8\\9\\10\\11\\12\\13\\14\\15\\16\\17\\18\\19\\20\\21\\22\\33\\25\\26\\27\\28\\29\\30\\31\\32\\33\\4\\35\\36\\37\\38\\39\\40\\41\\42\\43\\44\\45\\46\end{array}$	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 32 4 26 27 28 29 30 31 32 33 4 35 6 37 8 9 40 41 42 43 44 45 45 45 45 45 45 45 45 45

°d (German scale)	gr/gal	Setting
46	47	46
47	49	47
48	50	48
49	51	49
50	52	50
51	53	51
52	54	52
53	55	53
54	56	54
55	57	55
56	58	56
57	59	57
58	60	58
59	61	59
60	62	60

\*) factory setting

## Water softener

### Filling the salt reservoir

Only special, coarse-grained reactivation salt\* should be used in this machine.

\*Available from Miele. Please see back page for contact information.

Do not use other types of salt, e.g. table salt, agricultural or gritting salt. These could contain components which are insoluble in water and could damage the water softener. If in doubt, consult Miele's Professional Department.

The salt reservoir holds approximately 5.5 lbs (2.5 kg) of salt.

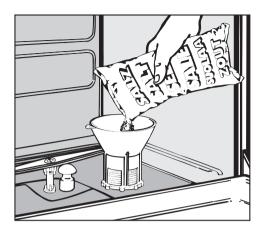
A Inadvertently filling the salt reservoir with detergent will damage the water softener.

## Before filling, make sure you are using reactivation salt.

- Remove the bottom basket from the machine.
- Unscrew the salt reservoir cap.

**Important:** The salt container must be filled with 0.6 gal (2.5 l) of water **before adding salt for the first time**. Water does not have to be added with subsequent refills.

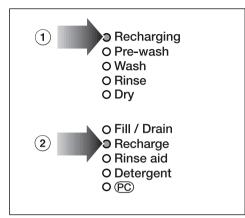
■ Place the funnel (provided) in place.



- Carefully fill the reservoir with salt.
   Displaced water will run out as it is being filled.
- Wipe any residual salt off the screw threads.
- Screw the cap on firmly.
- Immediately after this step: Run the "Rinse" program to remove any traces of salt from the cabinet.

**Note:** There may be a delay before the "Rinse" program starts due to the reactivation of the water softener.

### Salt indicator



When the salt reservoir is empty the "Recharge" indicator, ②, lights as a reminder to fill the reservoir.

Reactivation takes place automatically during a program. The "Recharging" indicator, ①, lights while this is occurring.

## **Rinse aid**

Rinse aid is needed to prevent spotting on dishes and glassware.

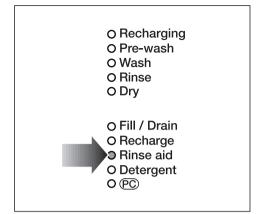
The rinse aid is filled in the reservoir and the set amount will be

automatically dispensed during the final rinse. The reservoir holds about 125 ml.

A Inadvertently filling the rinse aid reservoir with **detergent** (liquid or powder detergent) will damage the reservoir!

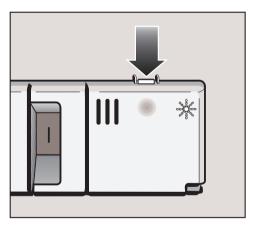
Only use rinse aid approved for this dishwasher.

### Adding rinse aid

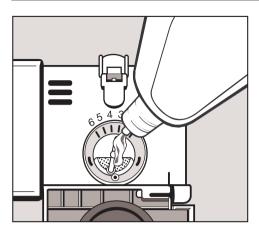


If the "Rinse aid" indicator lights, the rinse aid reservoir must be refilled.

Open the door fully.



Press the button in the direction of the arrow until the flap springs open.

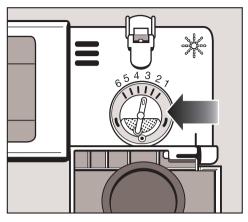


- Add rinse aid until it is visible on the surface of the filter in the opening.
- Close the flap until it clicks into place. Make sure it is firmly shut, otherwise water could get into the rinse aid reservoir during the program.
- Clean up any spilled rinse aid to prevent over-foaming during the next program.

The flap should always remain closed. Only open it to add more rinse aid.

Only add rinse aid when the rinse aid indicator comes on.

### Setting the dosage



The dosage selector (see arrow) is preset to 3. This dispenses approximately 3 ml of rinse aid per program. It can be adjusted from 1 to 6.

- Use a higher setting if spots appear on dry glassware.
- Use a lower setting if streaking appears on dishes or glasses.

## Loading the machine

### Preparation

Empty all containers before loading them into the machine.

Ensure that no acid or solvent residues, especially hydrochloric acid or chlorides get into the wash cabinet.

### Notes

- Load items so that water will come into contact with all surfaces. This ensures that they will be properly cleaned.
- Do not place items to be cleaned inside other pieces where they may be concealed.
- Hollow vessels such as cups, glasses, pots, etc. should be inverted and placed in the correct inserts.
- Deep based items should be placed at an angle to ensure that water runs off them freely.
- Tall, narrow, hollow pieces should be placed in the center of the basket to ensure good water coverage.
- Small pieces should be placed on the cup racks in the upper basket.
   Do not obscure them by larger items below. Cups should be on the lower rack and bowls on the top rack so that water reaches all pieces.
- The spray arms must not be blocked by items which are too tall or which hang down in their path. Check if they rotate freely.
- Do not place tall items in the front right area of the lower basket. They could prevent the detergent compartment flap from opening.

# Items not suitable for dishwashers

- Cutlery with wooden or horn handles
- Wooden or plastic cutting boards
- Glued items, e.g. old knives with handles which have been glued on
- Hand-made craft items
- Copper or tin items
- Plastic items which are not heat resistant

#### Please note

- Silver and aluminum items may slightly discolor.
- Colors painted over a glaze may fade after a number of washes.
- Clouding may occur on glasses after frequent washing.

#### **Our recommendations**

- Wash delicate glassware by hand.
- Only wash dishwasher safe glassware, dishes and cutlery.

## Upper basket

Ideal for small, lightweight, delicate items such as cups, saucers, glasses, dessert bowls, etc. as well as lightweight heat resistant plastic items.

## Bottom basket

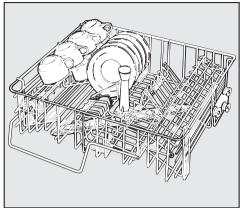
Ideal for larger and heavier items such as plates, serving platters, saucepans, bowls, etc. Glasses may only be cleaned in the bottom basket if it is fitted with a special glassware insert or if there is a special bottom basket.

## Cutlery

 Unsorted cutlery should be placed in the cutlery holders with the handles facing downwards.

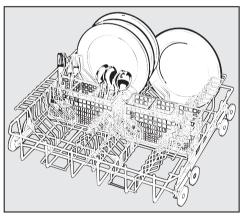
Select baskets and inserts which are appropriate for the application.

### Loading examples



### O 881 Upper basket:

for 20 cups, 24 saucers or 12 dessert plates



### U 880 Bottom basket:

with 2 x E 216 half inserts each for 15 plates Ø 9 ½" (240 mm) and 2 x E 165 cutlery baskets for mixed cutlery

### Adjusting the upper basket

The upper basket can be adjusted above and below the middle position by 1" (2.5 cm). It is set in the middle position on delivery.

Depending on the position of the upper basket, a variety of plate dimensions can be accommodated in the baskets.

For example: If the upper basket is in its highest position, a plate with a diameter of  $9 \frac{1}{2}$ " (24 cm) can be fit in the lower basket.

### To adjust the upper basket

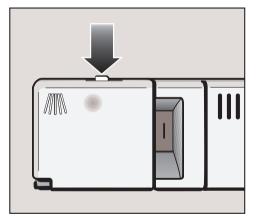
- Pull the upper basket out until resistance is felt, lift from the runners and remove.
- Unscrew the knurled nuts (roller bearings) on both sides of the basket with a suitable wrench and reposition as required.

**Only** use cleaning agents formulated for this machine. **Do not use detergents formulated for domestic dishwashers.** 

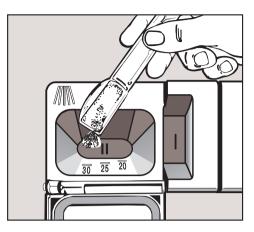
**Powder cleaning agent** is dispensed via the compartment for powder cleaning agents in the door.

**Liquid cleaning agents** are dispensed via the DOS-Module (available as an optional accessory).

If liquid cleaning agent is not being used, powder detergent must be placed in the detergent container prior to every program (with the exception of "Rapid" and "Rinse"). See the "Program guide" for more information.



Press the opening catch in the direction of the arrow. The flap will spring open. The flap is always open at the end of a program.



 Add powder cleaning agent to compartment II.

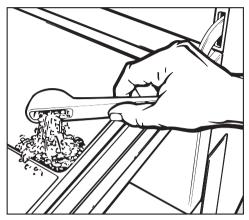
**Dosage:** approx. 3 g/l, it is equivalent to 1 ½ tablespoons (20 g) per program cycle.

In the program cycle "Wash" the water intake is approx. 7 I.

## Follow manufacturer's instructions if they differ.

Close the dispenser lid.

### "Rapid" program



If liquid cleaning agent is not being used, add powder detergent directly to the inside of the door for this program.

A different combination of cleaning agents and other additives may be necessary for special soiling. Contact Miele fore more information.

#### Note

This machine can be equipped with a dispenser pump for liquid cleaning agent (DOS-Module G 60) as an optional accessory. This is connected externally.

To vent the dosage system and set the dosage concentration see, "Programming special functions".

The DOS module comes with a separate Installation Manual.

# Maintenance of the dispensing systems

The following maintenance should be carried out by a Miele Service Technician to ensure trouble-free operation.

### Every 12-18 months:

Replace the dispensing hoses in the DOS module.

CAUTION when handling liquid agents and additives! They may contain irritant or caustic ingredients. Please follow the manufacturer's safety instructions. Wear protective gloves and goggles.



## Turning on

- Close the door.
- Open the water supply (if closed).
- Press the **On / Off** (I-0) button.

If the program selector is turned to "Stop" a dot lights in the display.

## Starting a program

Turn the program selector clockwise or counterclockwise to the required program. See the "Program guide" for information on the programs.

The display shows the first wash temperature of the selected program (except "Rinse" and "Drain"). The "Start" indicator flashes.

- If required select the additional feature "Extra Drying". See "Selecting an additional feature".
- Press the "Start" button. The running time is displayed in ascending minutes.

The "Start" indicator lights.

Once the program has started all other programs are blocked. If the program selector is turned to another program during the running program, the values shown in the display will go out. The values appear again if the program selector is turned back to the running program.

Press the "Display" button to alternate between the elapsed time and actual temperature in the display during the program.

Note: during the heating stage in "Main wash" and "Final rinse" the required end temperature is shown in the "time run" display field.

# Selecting an additional function

"Extra drying" can be selected as an additional function.

 Select the drying function directly after a program has been selected (not with "Rapid", "Rinse" and "Drain").

Drying is phased over 10 minutes. The total running time of the program lengthens accordingly.

## Program sequence display

The indicator for the **active** program sequence lights up during the program.

Recharging

Pre-wash

Wash

Rinse

Dry (optional function)

## At the end of a program

At the end of a program the program sequence indicators and the "Start" indicator go out. The display shows "0" and a buzzer sounds for 30 seconds (factory setting). The buzzer can be changed (see "Programming special functions").

If desired use the "Display" button to see the total running time of a program or the actual temperature.

### To turn the buzzer off

■ Turn the program selector to "STOP".

or

Open the door.

## Turning off

 Press and release the "On / Off" button.

### Changing a program

If the "Start" button has not yet been pressed, the selected program can be changed.

- Turn the program selector to the desired program.
- If required select the additional function "Extra Drying" again. See "Selecting an additional function".
- Press the "Start" button.

## Canceling a program

Once a program is running it should only be canceled in extreme cases, e.g. when items in the machine are moving and need to be arranged securely.

- Turn the program selector to "Stop". The program is canceled after 2 seconds.
- Open the door.

Caution! Water and items in the machine may be hot. Danger of burning or scalding!

- Rearrange the items securely. Observe appropriate health and safety regulations - wear protective gloves when necessary.
- Replenish powder detergent if necessary.
- Close the door.
- Select the "Drain" program. The waste water is drained.
- Select and start the program again.

Program	When to use	Program cycle				
		Pre- wash	Main wash 1)	Interim rinse 1 2 3 <sup>3)</sup>	Final rinse 1)	Drying (Option. funct.)
CHINA + CRYSTAL 120°F	For temperature sensitive glassware and lightly soiled dishware. Run-time: ~ 12 minutes* (plus 10 minutes for optional drying)		Х	X (X)	Х	(X)
RAPID 130°F	Rapid program for continuously used dishes.**) Powder detergent: Place detergent directly on the right hand side of the door interior, <b>NOT</b> in the detergent cup. Run-time: ~ 10 minutes*		Х	(X) <sup>2)</sup>	X **)	
SHORT 130°F	Quick program for lightly soiled dishware, e.g. party dishware or to remove salt traces from the wash cabinet after refilling salt. Run-time: ~ 15 minutes* (plus 10 minutes for optional drying)	X		(X)	Х	(X)

**Powder detergent dosage:** 1 ½ tablespoons (20 grams) in the detergent dispenser. Follow manufacturers instructions if they differ.

\*) Run times dependent on incoming water pressure and temperatures

### \*\*) Important information for the "Rapid" program

At the end of the program, the final rinse water is not drained away. It is used for the following "Rapid" program as wash water. If the operation is interrupted for a longer time or another program is desired:

- Select the program "DRAIN". The final rinse water is drained away.
- X = Sections included in the program (with temperature/temperature holding time)

<sup>1)</sup> Temperature or temperature holding time adjustment

(see "Programming special functions").

## Important: To clean dishes with soiling it is recommended to program a wash temperature of 140°F (60°C).

- <sup>2)</sup> To select an economy interim rinse see "Programming special functions".
- <sup>3)</sup> To select a second interim rinse see "Programming special functions".

## **Program guide**

Program	When to use	Program cycle				
		Pre- wash	Main wash 1)	Interim rinse 1 2 3 <sup>3)</sup>	Final rinse 1)	Drying (Option. funct.)
NORMAL 130°F	For normally soiled items. Run-time: ~ 24 minutes* (plus 10 minutes for optional drying)	X	Х	X (X)	Х	(X)
NORMAL PLUS 140°F	For normally soiled items. Higher wash temperature to remove starchy foods. Run-time: ~ 25 minutes* (plus 10 minutes for optional drying)	Х	Х	X (X)	Х	(X)
INTENSIVE 150°F	For heavily soiled items. Most of the soiling is removed in an intensive cold water pre-rinse. Run-time: ~ 30 minutes* (plus 10 minutes for optional drying)	ХХ	X	X (X)	Х	(X)
RINSE	To rinse heavily soiled items (e.g. for removing soiling or to prevent soiling from drying onto dishes when a full program does not need to be run).			Х		
DRAIN	To drain waste water, e.g. when a program has been interrupted (to interrupt a program, the program selector must be in the "STOP" position).					

**Powder detergent dosage:** 1 ½ tablespoons (20 grams) in the detergent dispenser. Follow manufacturers instructions if they differ.

\*) Run times dependent on incoming water pressure and temperatures

X = Sections included in the program (with temperature/temperature holding time)

<sup>1)</sup> Temperature or temperature holding time adjustment (see "Programming special functions").

## Important: To clean dishes with soiling it is recommended to program a wash temperature of 140°F (60°C).

<sup>2)</sup> To select an economy interim rinse see "Programming special functions".

<sup>3)</sup> To select a second interim rinse see "Programming special functions".

Every change of the factory setting should be documented in case of possible technical service. Record any changes in the field "Adjusted value\_\_\_\_\_".

#### 1. Setting the cold water inlet from: "Nominal water intake" to "Nominal water intake + 1 I".

The amount of water taken into the machine at each intake can be increased by 1 liter to a maximum of 9.5 liters.

- Turn the program selector to "STOP".
- Turn the machine off.
- Press and hold the "Display" and "Start" buttons, at the same time turn the machine on with the "On / Off button". The displays shows the current program status "P...". The "Fill/Drain" indicator lights.
- Press the "Extra Drying" button once.
   "E01" (programming level 1) is displayed.
- Turn the program selector to "China & Crystal".

Either "10" or "11" is displayed.

"10" = Nominal water intake

"11" = Nominal water intake + 1 liter

- Press "Display" to change from "10" to "11" or vice versa.
- Press the "Start" button. "SP" is displayed.
- Press the "Start" button again. The change has been saved.

Value set:

#### 2. Selecting a second interim rinse

A second interim rinse "Interim rinse II" can be programmed to improve interim rinsing in all programs (except for "Rinse" and "Rapid").

- Turn the program selector to "STOP".
- Turn the machine off.
- Press and hold the "Display" and "Start" buttons, at the same time turn the machine on with the "On / Off" button.
   The display shows the current

program status "P...". The "Fill/Drain" indicator lights.

- Press the "Extra Drying" button once.
   "E01" (programming level 1) is displayed.
- Turn the program selector to "Rapid".
   "30" or "31" is displayed.
   "30" = without interim rinse II
   "31" = with interim rinse II.
- Press "Display" to change from "30" to "31" or vice versa.
- Press the "Start" button. "SP" is displayed.
- Press the "Start" button again. The change has been saved.

Value set:

## 3. Selecting an economy interim rinse (only for "Rapid" program)

- Turn the program selector to "STOP".
- Turn the machine off.
- Press and hold the "Display" and "Start" buttons, at the same time turn the machine on with the "On / Off" button.
   The display shows the current program status "P...".
   The "Fill/Drain" indicator lights.
- Press the "Extra Drying" button once.
   "E01" (programming level 1) is displayed.
- Turn the program selector to "Rinse".
   "40" or "41" is displayed.
   "40" = without economy interim rinse
   "41" = with economy interim rinse
- Press "Display" to change from "40" to "41" or vice versa.
- Press the "Start" button. "SP" is displayed.
- Press the "Start" button again. The change has been saved.

Value set:

### 4. Venting and setting the dosage on "DOS modules G 60 and C 60" (optional extra)

- Set the dosage selector on the DOS-Module to the "10" position (on DOS Module C 60 only).
- Turn the program selector to "STOP".
- Turn the machine off.
- Press and hold the "Display" and "Start" buttons, at the same time turn the machine on with the "On / Off" button.

The display shows the current program status "P...". The "Fill/Drain" indicator lights.

 Press "Extra Drying" twice. "E02" (programming level 2) is displayed.

### Venting the dispensing system:

- Turn the program selector to "Rinse".
   "do1" is displayed.
- Press "Display" for 90 secs.
   The dosage system is vented.

If only **venting** is required:

Turn the machine off with **On / Off** (I-0) button.

**Immediately:** Start the "Rinse" program, so that after venting any agents in the wash cabinet are diluted before being drained away.

### Setting the dosage

Set the dispensing amount according to the detergent manufacturer's recommendations and the applications.

The machine needs 7 liters of water in the program cycle "Main wash".

### Example:

The detergent manufacturer recommends 4 ml of detergent per liter water.

 $7 \mid x 4 \mid m \mid / l = 28 \mid m \mid$ .

2 ml per 1 sec dispensing time; i.e. programming to 14 secs.

- Turn the program selector to "Short" the dispensing time in seconds is displayed, e.g "10".
- Press and hold "Display" until "14" is displayed (dispensing time 14 secs per 28 ml, see example above). The dosage time / dosage amount is set.

### Having changed a value or all values:

- Press the "Start" button. "SP" is displayed.
- Press the "Start" button again. The change has been saved.

Value set:

If the dispensing system was also **vented**:

Start the "Rinse" program, so that after venting any agents in the wash cabinet are diluted before being drained away.

## **Programming special functions**

5. Altering the cleaning temperature and/or the temperature holding time in the "Main Wash" and "Final rinse"stage of the program cycle

Any changes to the wash temperature and/or the temperature holding time should be recorded in the **program chart**.

The main wash and final rinse temperatures can be changed from 86°F - 158°F (30 °C - 70 °C) and the temperature holding time from 1 - 10 mins.

## Important: To wash dishes with soiling, program to 140°F (60°C).

- Turn the program selector to "STOP". The programming level is displayed in this position only.
- Turn the machine off.
- Press and hold the "Display" and "Start" buttons, and at the same time turn the machine on with the "On / Off" button.
   The displays shows the current program status "P...".
   The "Fill/Drain" indicator lights.

- Temperature "Main wash": Press "Extra Drying" three times. "E03" (programming level 3) is displayed.
- Turn the program selector to the program to be changed. The current value is displayed after °F.
- Press and hold "Display" until the desired value is displayed.
- Temperature holding time "Main wash":

Turn the program selector to the "STOP" position (the programming level is displayed in this position only).

- Press "Extra Drying" again. "E04" (programming level 4) is displayed.
- Turn the program selector to the program to be changed. The current value is displayed after **min**.
- Press "Display" until the required value is displayed.

### Temperature "Final rinse":

Turn the program selector to the "STOP" position (the programming level is displayed in this position only).

- Press "Extra Drying" again. "E05" (programming level 5) is displayed field.
- Turn the program selector to the program to be changed. The actual value is displayed after °F.
- Press and hold "Display", until the desired value is displayed.

Temperature holding time "Final rinse":

Turn the program selector to the "STOP" position (the programming level is displayed in this position only).

- Press "Extra Drying" again. "E06" (programming level 6) is displayed field.
- Turn the program selector to the program to be changed. The actual value is displayed after **min**.
- Press "Display" until the required value is displayed.
- Having changed a value or all values:
- Press the "Start" button. "SP" is displayed.
- Press the "Start" button again. The change has been saved.

## 6. Delay start and setting the delay start time

The start of a wash program can be delayed up to 9 hours and 30 minutes in 30 minute increments.

Delay start should only be selected with the "Normal" and "Intensive" programs. The short programs cannot guarantee satisfying cleaning results when the residues are allowed to dry on because the start time is delayed.

### a) To activate Delay Start

- Turn the program selector to "STOP".
- Turn the machine off.
- Press and hold the "Display" and "Start" buttons, at the same time turn the machine on with the "On / Off" button.
   The display shows the current program status "P...".
   The "Fill/Drain" indicator lights.
- Press the "Extra Drying" button once.
   "E01" (programming level 1) is displayed.
- Turn the program selector to "Drain" either "80" or "81" is displayed.
   "80" = No Delay Start
   "11" = Delay Start active
- Press "Display" to change from "80" to "81" or vice versa.
- Press the "Start" button. "SP" is displayed.
- Press the "Start" button again. The change has been saved.

Value set:

### b) Setting the delay start period

The delay start period (from 30 minutes to 9 hours 30 mins) must be set before a program is started.

 After selecting a program (see "Turning on") press or hold the "Display" button it until the required value is displayed. The "Delay Start" indicator lights.

After the "Start" button is pressed the delay start period will count down in the display until the program automatically starts.

## Programming special functions

### 7. Buzzer

A buzzer (30 secs) can be set for the following functions:

- End of program = Buzzer constantly
- Error = Buzzer sounds every other second
- Turn the program selector to "STOP".
- Turn the machine off.
- Press and hold the "Display" and "Start" buttons, at the same time turn the machine on with the "On / Off" button.
   The display shows the current program status "P...".
   The "Fill/Drain" indicator lights.
- Press the "Extra Drying" button once.
   "E01" (programming level 1) is displayed.
- Turn the program selector to "Intensive".

The display shows a figure between "90" and "93".

- "90" = Buzzer turned off
- "91" = End of program
- "92" = Fault

"93" = All functions / End of program / Fault (default)

- Press "Display" until the desired function is displayed.
- Press the "Start" button. "SP" is displayed.
- Press the "Start" button again. The change has been saved.

Value set:

## 8. Re-setting all changes back to the factory default

- Turn the program selector to "STOP".
- Turn the machine off.
- Press and hold the "Display" and "Start" buttons, at the same time turn the machine on with the"On / Off" button.
   The display shows the current program status "P...".
   The "Fill/Drain" indicator lights.
- Press "Extra Drying" seven times.
   "E07" (programming level 7) is displayed.
- Turn the program selector to any position (except "STOP").
   The display shows either "00" or "PP".
   "00" = factory setting (electronic was not reset).
   "PP" = Electronic was reset.
- If "PP" is displayed press "Display" to change from "PP" to "00".
- Press the "Start" button. "SP" is displayed.
- Press the "Start" button again. Values which had been changed are now reset.

If the hardness level setting in the water softener had been changed this will reset to the factory setting of 19 gr/gal (19 °d). This will need to be adjusted back to the hardness level in your area.

### Filter combination

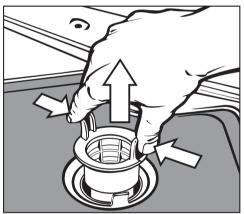
The machine must not be used without all filters in place. The filters protect the circulation pump from damage caused by foreign objects.

The filter combination in the base of the wash cabinet should be inspected regularly and cleaned if necessary.

#### Caution:

Watch out for sharp objects which could cause injury.

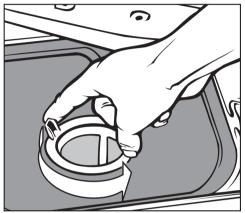
#### Cleaning the coarse filter



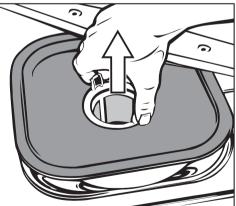
- Press the two tabs together. Remove and clean the coarse filter.
- Put the clean filter back in position and press until it clicks in place.

# Cleaning the fine, flat and micro-fine filters

- Remove the coarse filter.
- Remove the fine filter (if fitted) from between the flat and micro-fine filters.



To unscrew the micro-fine filter, grasp the two tabs and turn counter-clockwise twice.



- Remove both filters together.
- Clean the filters.
- Replace the filter combination in the reverse order. The flat filter must lie flat in the base of the wash cabinet.

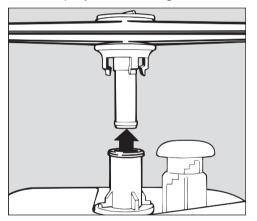
#### Cleaning the spray arms

From time to time, particles may become trapped in the spray arm jets. The spray arms should be inspected and cleaned every 4 - 6 months.

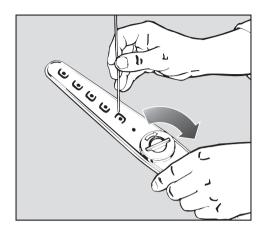
Remove the spray arms as follows:

- Unscrew the **upper** spray arm.
- Unscrew the middle spray arm (under the upper basket) clockwise at the knurled nut.

The knurled nut has a left hand thread. To unscrew the spray arm turn the nut and the spray arm to the right.



Remove the **lower** basket. Pull the lower spray arm firmly upwards to remove.

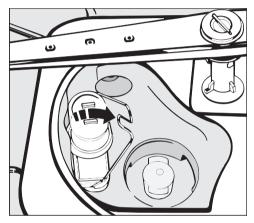


- Use a sharp pointed object to push particles into the spray arm jets and rinse thoroughly under running water.
- Open the cap of the **lower** spray arm, by turning it clockwise, to rinse out particles.
- After cleaning close the cap tightly.
- After replacing the spray arms check that they rotate freely.

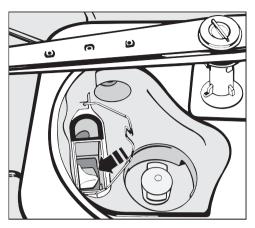
# Cleaning the non-return valve and drain pump

If water has not been pumped away at the end of a program, the drain pump or non-return valve may be blocked.

- Turn off the washer.
- Remove the filter combination from the wash cabinet.



- Tilt the locking clamp to the side.
- Pull out the non-return valve and rinse under running water.



The drain pump is located beneath the non-return valve (see arrow).

- Before returning the non-return valve, check that the drain pump is not blocked. Spin the propeller several times in both directions to check for obstructions.
- Carefully refit the non-return valve and secure it with the locking clamp.
   Refit and lock the filter in place.

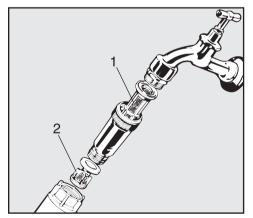
# Cleaning the filters in the water inlet

Filters are incorporated in the screw connection of the water inlet hose to protect the water inlet valve. If these filters become dirty they need to be cleaned, otherwise insufficient water flows into the wash cabinet.

The plastic housing of the water connection contains an electrical component. It must not be submerged in water.

#### To clean the filters

- Disconnect the machine from the main electrical supply.
- Turn off the water supply.
- Unscrew the water inlet hose.



Clean the large area filter, 1, and fine filter, 2. Replace with new filters if necessary.

- Replace the filters and seal. Make sure they are sitting correctly.
- Reconnect the hose to the water inlet, making sure that is not cross-threaded.
- Open the water tap carefully. If there is a leak, tighten the connections.

### Cleaning the control panel

The control panel should only be cleaned with a damp cloth or a cleaner suitable for use on plastics.

A Do not use abrasive cleaners, glass cleaners or all-purpose cleaners. They **will** damage the control panel.

# Cleaning the front of the machine

Use a cleaner suitable for the type of material the machine front is fitted with.

A Do not use detergents containing ammonia or thinners.

With the aid of the following notes, minor faults can be corrected without contacting the Miele Service Department.

Any work on the electrical components of the machine should only be carried out by a qualified and trained person in accordance with local and national safety regulations. Unauthorized repairs could cause personal injury or machine damage.

### Faults / possible causes

#### The machine does not start

- the door is not properly closed
- the plug is not properly inserted
- the fuse is defective or has blown

#### A few minutes after turning on, the "Fill/Drain" indicator flashes (fault code F..E is displayed)

- the valves are closed
- the filters in the water inlet hose are dirty
- water pressure is too low
- Turn the program selector to the "STOP" position (the fault code goes out).
- Turn the machine off.
- Open the valves or clean the filters (see "Machine care").
- Turn on the machine again and re-select the program.

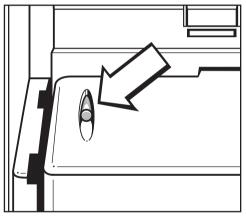
#### The wash cycle finishes too early and the"Fill/Drain" indicator flashes (fault code F A is displayed)

- the drain hose is kinked
- the drain pump is blocked
- Turn the program selector to the "STOP" position (the fault code goes out).
- Correct the fault.
- Drain the water and start the program again (see the drain program and "Turning on").

# Water in the wash cabinet is not heated / the program sequence lasts too long

This machine has a resettable heater limiter which will switch off the heaters in the case of over-heating. This could be caused, for example, by large articles obscuring the heating elements or when the filters in the wash cabinet are blocked.

- Remove the cause of the fault.
- Take off the service panel (see "Electrical connection").



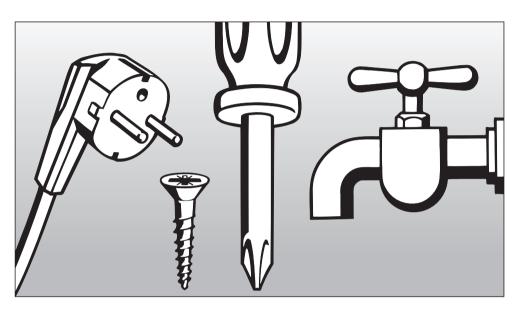
Press the reset button on the heater limiter (yellow) located on the lefthand side of the plastic cover.

If this switch trips again, please contact the Miele Technical Service Department. In the event of a fault which you cannot correct yourself or if the fault code "F..." shows in the display please contact the Miele Service Department at the phone number on the back of these instructions.

Please quote the model and serial number of your machine.

This information can be found on the data plate (see also "Electrical connection").





# Installation Instructions

To prevent accidents and machine damage read these instructions **before** installation or use.

# Disposal of the packing material

The protective packing materials are environmentally safe and can be recycled.

Ensure that any plastic wrappings, bags, etc. are disposed of safely and kept out of the reach of children. Danger of suffocation!

### Disposal of the appliance

Appliances contain materials which can be recycled. Please contact your local authorities about recycling in your area.

Ensure that the machine presents no danger to children while being stored for disposal. See "Important Safety Instructions".

# Please refer to the installation diagram supplied with the machine.

Furniture and fittings installed near the machine must be of a commercial standard, able to withstand the effects of steam and condensed water.

#### Installation options

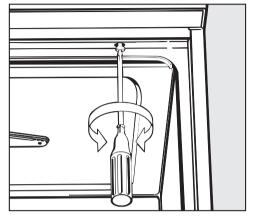
- Free-standing

#### - Undercounter

The machine should be positioned under a continuous worktop or sink drainer.

The opening must be at least 23 5/8" (60 cm) wide, 23 5/8" (60 cm) deep and 34 1/4" (82 cm) high. If necessary, the machine lid can be removed as follows:

Open the door.



- Remove the fixing screws on both sides using a Phillips screwdriver.
- Pull the machine lid approx. ¼"
   (5 mm) forwards, lift and remove.

### Leveling the machine

Any unevenness in the floor can be compensated for.

 Adjust the four screw feet to raise or lower the height of the machine.

# Position and secure the machine

To ensure stability the machine must first be aligned and then screwed to the countertop.

- Open the door.
- Through each of the two holes in the front trim, left and right, screw the machine to the front edge of the continuous countertop.
- Do not use silicone sealant to seal the gaps between the machine and any neighboring units, this would hinder ventilation to the circulation pump.

### Stainless steel toe kick

A stainless steel toe kick is included for easing undercounter installations. Please refer to installation directions included with the toe kick. Depending on the requirements for installation, the following "**kits**" can be ordered from the Miele.

#### Cover plate (protects the countertop)

The underside of the countertop is protected from steam damage by a "niro" stainless steel plate. All electrical work must be carried out by a suitably qualified person in compliance with local and national safety regulations.

A damaged power cord must only be replaced with a genuine Miele cord by a Miele Service Technician.

For technical data see the data plate or wiring diagram supplied.

The machine must only be operated with the voltage, frequency and fusing shown on the **data plate**.

The **data plate** is located on the rear of the machine and behind the service panel on the upper left side.

The dishwasher can be **converted** according to the supplied **converting diagram** and **wiring diagram**.

The **wiring diagram** is located behind the operating panel.

The **conversion diagram** is located behind the service panel.

 See also the supplied installation diagram.

### WARNING THIS APPLIANCE MUST BE GROUNDED

#### Grounding the machine

A connection screw with the grounding symbol  $(\frac{1}{\sqrt{2}})$  is provided on the back of the machine for grounding.

### PLEASE NOTE:

The G 7856 is available as two separate versions:

a 240V version,

a 208V version.

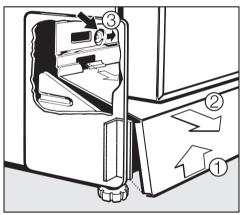
To avoid machine damage, please ensure proper outlet voltage prior to installation.

# Removing the service panel and the protective plastic cover

Alsolate the machine from the power supply.

- Holding the service panel on both sides, pull gently outwards from beneath, ①, and remove it, ②.
- Remove the protective plastic cover and unscrew the 2 screws (left and right), ③.

To reassemble:



- Refit the protective plastic cover and the service panel in the reverse order.
- See also the supplied installation diagram.

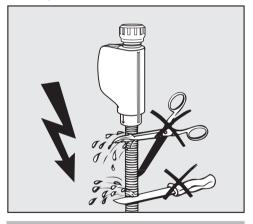
### Connection to the water inlet

Water in the machine is not suitable for drinking.

- The machine must be connected to the water supply in accordance with local and national regulations.
- The machine is constructed to comply with Canada regulations, and may be connected to a suitable supply without an extra non-return valve provided that national regulations allow this.
- The water pressure (flow rate) must be a minimum of 7.25 - 145 psi. If the water pressure (flow rate) is below 29 psi the fill time is automatically extended. The maximum permitted static pressure is 145 psi. If the water pressure is not in the range of 7.25 - 145 psi the "Fill/Drain" indicator may come on and the fault code "F2 E" will show in the display.
  - Please contact the Miele Service Department.
- The machine is supplied as standard for connection to a cold (coded blue) and a hot (coded red) water supply up to a max. temperature of 158°F (70 °C).

The inlet hoses should be connected to the cold and hot water supplies. If there is no hot water connection the hot water inlet hose marked red should also be connected to a cold water supply.

- Valves with 3/4 inch male threads are to be provided on site. They should be easily accessible so that the water supply can be turned off when the machine is not in use.
- The DN 10 inlet hose is approx. 5' 7 " (1.7 m) long ending in a 3/4 inch female thread. Do not remove the inlet filters.
- Large surface area filters are enclosed in the kit supplied with the machine for installation between the valve and the inlet hose (see illustration in "Machine Care -Cleaning the filters in the Water inlet").



The inlet hose must **not** be shortened or damaged in any way.

See also the supplied installation diagram.

# Plumbing

### Drainage

- The drainage system is fitted with a non-return valve which prevents dirty water from flowing back into the machine via the drain hose.
- The machine should preferably be connected to a **separate** drainage system onsite.

If separate drainage is not available contact your Miele application specialist for advice.

The onsite drain connection point should be located between 1 ft.

(0.3 m) and 3 ft. (1 m) **above the lower edge of the machine**.

If it is lower than 1 ft. (0.3 m), lay the hose in a curve at a height of at least 1 ft. (0.3 m).

The drainage system must be able to take a minimum drainage flow of 16 l/min.

- The drain hose is approx. 5 ft. (1.5 m) long, is flexible and has an internal diameter of 7/8 in. (22 mm). It must not be shortened. Hose clamps are supplied for securing it in position.
- A longer drain hose (up to 13 ft. [4 m] long) is available to order from Miele.
- The drainage system must not exceed 13 ft. (4 meters).
- See the supplied installation diagram.

## **Technical data**

	English	Metric
Height:	33 <sup>1/2</sup> " (32 <sup>1</sup> / <sub>4</sub> ")	85 (82) cm
Width:	23 <sup>5</sup> / <sub>8</sub> "	60 cm
Depth:	23 <sup>5</sup> / <sub>8</sub> "	60 cm
Voltage: Rate load: Fuse rating:	see data plate see data plate see data plate	
Connection cable:	approx. 5' 10"	1.8 m
Water pressure (flow pressure):	7.25 - 145 PSI	50 - 1000 kPa
Cold or hot water connection:	up to max. 158°	70 °C
Drainage length:	max. 13'	4 m
Delivery head:	min. 12" max. 39 <sup>3</sup> / <sub>8</sub> "	0.3 m 1 m
Inlet hose:	approx. 5' 7"	1.7 m
Drain hose:	approx. 4' 7"	1.4 m
Noise level in dB (A):	Built under: 61	

Please have the model and serial number of your appliance available before contacting Technical Service.



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